COMMENTARIES

Internet addiction over the decade: a personal look back

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The Internet has certainly changed since I first began to study Internet addiction in 1994. Then, it cost \$2.95 per hour to login. Applications such as *MySpace, Facebook, YouTube*, and *Second Life* did not exist. Modem speeds ranged from 14.4 to 28.8 mbps. Web sites started proliferating the Internet, and most without any graphics, sound, or video. Only a growing number of schools and businesses were connected to the Internet.

By the late 90s, the height of the Dot Com era before the bubble burst, everyone was clamoring to learn more about the Internet. Computer companies were dolling out new technologies faster than people could buy them and any company with dot com after its name was assumed to make millions. No one was worried about the potential for addiction.

Yet, after a friend called me to tell me of her divorce because her husband became addicted to AOL chat rooms, it made me wonder if others could get addicted to the Internet in the same way as people become addicted to drugs, alcohol, gambling, food, and sex. It was a daunting and challenging task. I was fresh out of graduate school with my doctorate in clinical psychology. I had studied neuropsychology, a far cry from being an Internet addiction expert, yet, hearing story after story about people suffering because of the Internet and how their use had taken over aspects of their lives, I knew that I had to share what I had learned.

In 1998, I wrote *Caught in the Net*, the first book to identify Internet addiction (1). Publishing the book changed my life. Once published, the publicity around the book took on a life of its own. I joked that I had become the Ann Landers of cyberspace, as letters and email from across the globe poured in. I heard from parents, spouses, and addicts themselves struggling to deal with

an addiction that they could not understand. Yet, after reading *Caught in the Net*, they found validation and understanding to a disorder that they knew they were experiencing but had not been recognized by many professionals when they tried to seek help.

After *Caught in the Net* was published, many journalists and scholars did not believe that people could become addicted to the Internet. At that point, many laughed and scoffed at the idea. How could a tool so useful for information and communication be considered addictive?

These early studies and those of my colleagues such as D. Greenfield (2) and M. Orzack (3) opened the conversation to the darker side of what lied ahead. Could it be too much? Research in the field of Internet addiction has grown substantially. Studies have focused on clinical diagnosis, epidemiology, psychosocial risk factors, symptom management, and treatment outcome. Internet addiction has not only been identified as a national problem in the US, but in countries such as China, Korea, and Taiwan. Media reports suggest Internet addiction has reached epidemic proportions.

Healthcare professionals started seeing cases of people who suffered from Internet-related clinical problems. Pioneer treatment centers specializing in Internet addiction recovery emerged at McLean Hospital, a Harvard Medical School affiliate, and at the Illinois Institute for Addiction Recovery at Proctor Hospital in Peoria, Illinois. Inpatient addiction rehabilitation centers such as The Canyon, Sierra Tucson, and The Meadows started to include Internetrelated compulsivity as one of the subspecialties they treat. Globally, the first inpatient treatment center opened in Beijing, China in 2006, and it is estimated that Korea has over 140 Internet addiction treatment recovery centers. Most recently, the first inpatient residential care center opened in the US: the Restart Program in Redmond, Washington.

It is difficult to estimate how wide-

spread the problem is. A nationwide study led by E. Aboujaoude (4) estimated that nearly one in eight Americans suffer from at least one sign of problematic Internet use. Studies abroad have documented Internet addiction in a growing number of countries such as Italy, Pakistan, Iran, Germany, and Czech Republic, to name a few.

Globally, we see that science has greatly contributed to our understanding of compulsive or addictive use of the Internet and that new forms of treatment are emerging. These include traditional twelve-step recovery, cognitive-behavioral therapies, and more intensive forms of treatment such as residential inpatient care.

While much attention has been paid to Internet addiction in the academic and clinical fields, developing universal standards of care and assessment has been difficult, because the field is culturally diverse and terminology in the academic literature has varied, from Internet addiction to problematic Internet use or pathological Internet use. The American Psychiatric Association has proposed including the diagnosis of "pathological computer use" in the DSM-IV revision, concluding that this is the broadest term to use.

Overall, I can say that we are only beginning to understand the impact of the Internet. It is my hope that in the next decade we will understand so much more about its social and clinical implications.

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